

It may be difficult to identify the snake. DON'T bother - IDENTIFY THE VENOM.: An accurate diagnosis can be made on clinical signs and symptoms

Venom Categories	Snakes native to the Western Cape	South African Snakes not native to the Western Cape	Exotic Snakes not native to South Africa but kept by herpetophiles
 Neurotoxic	Cape Cobra Black Necked Spitting Cobra Rinkals (all covered by PVA*) Berg Adder (No antivenom)	Black Mamba Green Mamba Egyptian Cobra Forest Cobra (all covered by PVA*)	Coral Snake (No antivenom)
Cytotoxic	Puff Adder (covered by PVA*)	Gaboon Viper Mozambique Spitting Cobra (Mfezi) (all covered by PVA*) Night Adder Stiletto Snake (No antivenom)	Rattlesnake Group - Rattlesnakes - Cottonmouth - Copperhead (Ovine-based antiserum, FAB AV; available on enquiry)
Haemotoxic	Boomslang (covered by MVA*)	Vine Snake (No antivenom)	

* PVA = SAIMR Polyvalent Antiserum MVA = Monovalent Boomslang Antiserum

Snake Handlers who get bitten can usually accurately identify the offending snake.
There are numerous South African snakes that cause minor symptoms of envenomation, are not lethal and for which antivenom is not necessary.
(Skaapstekers, Night adders, Horned Adders) 95 % of Western Cape envenomations are Puff Adder or Cape Cobra.

Use a Standard ATLS approach: ABCDE
Assess - Intervene - Reassess: Assessment and Management occur in tandem

DMIST Handover from Ambulance
TRIAGE patient using SATS
Measure and Record Vital Signs
Fingerprick Haemoglobin

Examination

Primary: Assess ABCs then Secondary Head-to-toe Examination

Airway - may be unable to clear secretions and exhibit hypersalivation
Breathing may be compromised by respiratory muscle weakness
Assess for shock and signs of unusual bleeding (haematuria/oozing from wound)
Neurological examination and cranial nerves
Neurovascular status of limb, swelling and dermal necrosis

Take a SAMPLE History

Signs and Symptoms: Cytotoxic; Neurotoxic; Haemotoxic
Allergies
Medications
Past Medical history
Last Meal
Events: Geographic area. Type of snake. Associated trauma

1. Has envenomation occurred?

2. Are there clinical symptoms consistent with one of the three main types of envenomation in the Western Cape?

Neurotoxic	Cytotoxic	Haemotoxic
Weakness - Paraesthesia - Ptosis Paralysis Respiratory Failure (May be delayed onset)	Severe pain, Bruising and Swelling at bite site Extends to regional lymph nodes	Bleeding from wound site; Ecchymoses Haematuria DIC Renal failure

3. Is there an antivenom to cover this clinical picture?

4. Are the symptoms severe enough to warrant antivenom?

Investigations

Depend on the clinical scenario : Hb, Plt, CK, Renal Function, DIC screen

EM013

Snakebite Management

P2

Stabilise ABC's

FIRST AID

- Immobilise the body part
- Pressure dressings are controversial
- DO NOT apply a tourniquet
- DO NOT incise the wound
- DO NOT administer antivenom out side the hospital setting

Eye envenomation: Copious irrigation with water

Has envenomation occurred?

NO
No marks on skin
AND
asymptomatic for
an hour post-bite

Discharge
Advise to return if
symptoms develop

Suspected but not obvious
Envenomation:
Marks on Skin
BUT
Asymptomatic

Admit overnight
Observe
Elevate limb
If no progressions of
symptoms:
Discharge the next day

YES
Bite Marks
AND/OR
Symptomatic

Is envenomation severe enough to warrant antiserum?

No

Yes

Insert an IV line
Doctor to administer antivenom personally. No test dose or pretreatment needed
BUT
WATCH FOR ANAPHYLAXIS (Itching; Wheezing; Urticaria; Perioral anaesthesia)
If any of these occur: STOP the injection
Give: 0.3 mg IM Adrenaline; 200 mg IV Hydrocortisone; 25 mg IV Phenergan

Which type of envenomation does the clinical scenario fit ?

Neurotoxic

Cytotoxic

Haemotoxic

ADMINISTER POLYVALENT ANTISERUM (10ml vials)

40-80 mls (4-8 vials)
Slow IV injection
Titrate to symptoms
Assess for improvement every 30 minutes
Give ADEQUATE DOSE(Especially with Puff Adder bites)

Medical/ICU Referral

ADMINISTER MONOVALENT ANTIVENOM (10mls vials)

Start at 40 mls
Monitor haematological parameters
Repeat dose if needed

Medical Referral

Surgical Referral

Remember to give analgesia as needed
MORPHINE IV 10mg in 10ml Water
Bolus 2-5 mg every 30 minutes
Titrate to analgesic effect
Watch BP, LOC, RR

IMPORTANT NUMBERS	
SOUTH AFRICAN ANTIVENOM UNIT (SAVP) 011 386 6016	FOR CLINICAL ADVICE CALL TBH POISON CENTRE 021 931 6129